

ABSTRACT

Systems and methods for providing haptic cues to a touch-sensitive input device having a rotary degree of freedom are described. One system described comprises a touch sensitive input device is configured to move in a rotary degree of freedom. The system further comprises an actuator configured to produce a rotational force on the touch-sensitive input device. In one such system, the actuator comprises an electromagnetic core configured to produce force on a magnet affixed to the touch-sensitive input device. In another such system, a motor provides the rotational force.